

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1-9 (canceled)

Claim 10 (new). A method for preparing a water-dispersible liquid vitamin food additive for animals, said food additive being substantially free of water, said method comprising the steps of:

sequentially adding, under agitation,

- (a) from 40% to 90% by weight of a vitamin component in from 1% to 12% of an oil, said vitamin component being selected from the group consisting of:
 - (i) one or more precursors of vitamin A,
 - (ii) one or more precursors of vitamin E,
 - (iii) a mixture of one or more precursors of vitamin A and one or more precursors of vitamin E,
 - (iv) a mixture of one or more precursors of vitamin A and vitamin D3,
 - (v) a mixture of one or more precursors of vitamin E and vitamin D3, and
 - (vi) a mixture of one or more precursors of vitamin A, one or more precursors of vitamin E and vitamin D3;
 - (b) from 5% to 50% of one or more veterinarily acceptable emulsifiers;
 - (c) from 2% to 10% of a C1 to C6 alkyl lactate;
 - (d) from 2% to 10% of a C2 to C6 mono-hydroxy alcohol;
- and mixing until homogeneous.

Claim 11 (new). The method of claim 10, further comprising up to 5% of a stabilizer, said stabilizer being added after the emulsifier (b) is added and before the alkyl lactate (c) is added, or after the alkyl lactate (c) is added and before the mono-hydroxy alcohol (d) is added.

Claim 12 (new). The method of claim 10, wherein the ratio of the alkyl lactate (c) to the mono-hydroxy alcohol (d) is from 1:1 to 3:1.

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Claim 13 (new). The method of claim 12, wherein the ratio of the alkyl lactate (c) to the mono-hydroxy alcohol (d) is from 1.5:1 to 2.8:1.

Claim 14 (new). The method of claim 10, wherein the one or more emulsifiers (b) is a non-ionic surfactant selected from the group consisting of polyethylene glycol esters and ethoxylated sorbitan fatty esters.

Claim 15 (new). The method of claim 10, wherein the alkyl lactate (c) is selected from the group consisting of methyl lactate, ethyl lactate, n-propyl lactate, iso-propyl lactate, n-butyl lactate, sec-butyl lactate, tert-butyl lactate, n-pentyl lactate, n-hexyl lactate and other isomeric forms thereof.

Claim 16 (new). The method of claim 10, wherein the oil of component (a) is a vegetable oil selected from the group consisting of soybean oil, corn oil, canola oil and peanut oil.

Claim 17 (new). The method of claim 10, wherein the component (a) is dl-alpha-tocopheryl acetate in oil.

Claim 18 (new). The method of claim 10, wherein the component (a) is the retinyl propionate in canola oil.

Claim 19 (new). The method of claim 10, wherein the component (a) is the retinyl propionate in canola oil and the vitamin D3 in oil.

Claim 20 (new). The method of claim 10, wherein the component (a) is the vitamin D3 in oil, the dl-alpha-tocopherol in oil and retinyl propionate in canola oil.

Claim 21 (new). The method of claim 10, wherein the viscosity of the food additive is from 1000 cP to 10,000 cP at 0°C.

Claim 22 (new). A method for dispersing a water-dispersible liquid vitamin food additive for animals, said food additive being substantially free of water, said method comprising the steps of:

preparing the food additive by sequentially adding, under agitation,

- (a) from 40% to 90% by weight of a vitamin component in from 1% to 12% of an oil, said vitamin component being selected from the group consisting of:

- (i) one or more precursors of vitamin A,
 - (ii) one or more precursors of vitamin E,
 - (iii) a mixture of one or more precursors of vitamin A and one or more precursors of vitamin E,
 - (iv) a mixture of one or more precursors of vitamin A and vitamin D3,
 - (v) a mixture of one or more precursors of vitamin E and vitamin D3, and
 - (vi) a mixture of one or more precursors of vitamin A, one or more precursors of vitamin E, and vitamin D3;
- (b) from 5% to 50% of one or more veterinarily acceptable emulsifiers;
 - (c) from 2% to 10% of C1 to C6 alkyl lactate;
 - (d) from 2% to 10% of a C2 to C6 mono-hydroxy alcohol; and
- mixing until homogeneous; and

dispersing said food additive into water within 2 minutes when added at a ratio of said food additive to water from 1g/kg to 100 g/kg.

Claim 23 (new). The method of claim 22, comprising dispersing said food additive into water within 20 seconds when added at a ratio of said food additive to water from 1g/kg to 100 g/kg.

Claim 24 (new). A method for dispersing a water-dispersible liquid vitamin food additive for animals comprising the step of dispersing a food additive prepared according to the method of claim 1 into water within two minutes when added at a ratio of said food additive to water of from 1 g/kg to 100g.kg.

Claim 25 (new). The method of claim 24, comprising dispersing said food additive into water within 20 seconds when added at a ratio of said food additive to water from 1g/kg to 100 g/kg.